

by Steven A. Williams

# Partners in Plant Conservation



**USFWS Director Steven A. Williams**  
*USFWS photo*

I am pleased to introduce this issue of the *Endangered Species Bulletin*, which is dedicated to the conservation efforts of the member institutions of the Center for Plant Conservation. Since its founding in 1984, the Center has been an important partner with the Fish and Wildlife Service in the conservation of our imperiled native plants.

Our nation is a vast land that stretches from above the Arctic Circle to below the Tropic of Cancer, and it spans nearly a third of the globe from eastern Maine to the tip of the Aleutian Islands in Alaska. This enormous geographical expanse supports over 20,000 species of plants in more habitats than any other nation on earth. From the deciduous forests of the Appalachian Mountains to California's coastal sage, and from Alaska's tundra to the tropical forests of Puerto Rico and Hawaii, plants define our landscapes, and many species are truly unique. Among our plant treasures are the giant redwoods of coastal California, the world's tallest trees, with individual specimens rising as high as a 35-story office building. And some bristlecone pines are arguably the oldest living organisms on earth.

Plants are also essential to the well-being of the animal world in both familiar and fascinating ways. Many plants depend on animals such as hummingbirds, bats, beetles, bees, and butterflies for pollination. Unfortunately, among our threatened and endangered species are 23 butterflies. Some have become imperiled in part by the loss of host plants for their larvae or nectar species required by adults. One endangered butterfly, the Fender's blue (*Icaricia icarioides fenderi*), depends on a threatened plant, the Willamette Valley

or Kincaid's lupine (*Lupinus sulphureus* var. *kincaidii*), a relationship that demonstrates the intimate and sometimes fragile interdependence of life.

Recently, biologists discovered that Pinnacles National Monument in California supports over 400 species of native bees, more than any other place in North America. Many bees are very selective in their choice of forage plants, and some are the sole pollinators of specific species of plants. However, in the midst of such a unique diversity of bee and plant species, the presence of introduced plants poses a serious threat. Exotic plants can crowd out native plant species, ultimately reducing or causing the loss of highly selective pollinator species. Conversely, declines in pollinator populations can result in the decline or loss of native plant species. Besides habitat loss, nonnative and invasive plant species are the second most significant threat to native plants. Nowhere is this threat more of an issue than in Hawaii.

The Hawaiian Islands are home to about 1,500 native species of plants, with 90 percent being endemic. Habitat modification and loss, as well as threats from nonnative species of plants and animals, have made Hawaii the global epicenter of plant extinction, with more than 100 plant extinctions over the past 200 years. Similar situations are found in parts of California, Florida, Puerto Rico, and elsewhere around the Nation.

It is against these challenges that our partnerships with the Center for Plant Conservation, its member institutions, and the dedicated people that conserve and recover our native plant species stands out.

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*Dr. Williams is the Director of the U.S. Fish and Wildlife Service.*